

AMENDMENTS TO THE CLAIMS

1. (original) A method for producing a polyelectrolyte membrane, comprising the step of:
immersing a basic polymer in a strong acid having a concentration sufficient to
impregnate the basic polymer with six or more strong acid molecules per polymer
repeating unit of the basic polymer at a temperature of not less than 30°C for a period of
5 h or less.
2. (original) The method according to claim 1, wherein the immersion time is 1 hour or less.
- 3-7. (cancelled)
8. (previously presented) The method according to claim 1, wherein the strong acid is
phosphoric acid.
9. (previously presented) The method according to claim 2, wherein the strong acid is
phosphoric acid.
10. (previously presented) The method according to claim 1, wherein the strong acid is
sulfuric acid.
11. (previously presented) The method according to claim 2, wherein the strong acid is
sulfuric acid.
12. (previously presented) The method according to claim 1, wherein the strong acid is
phosphoric acid having a concentration of not less than 80% by weight.

13. (previously presented) The method according to claim 2, wherein the strong acid is phosphoric acid having a concentration of not less than 80% by weight.
14. (previously presented) The method according to claim 1, wherein the basic polymer is selected from the group consisting of polybenzimidazole, polypyridine, polypyrimidine, polyimidazole, polybenzthiazole, polybenzoxazole, polyoxadiazole, polyquinoline, polyquinoxaline, polythiadiazole, polytetrazapyrene, polyoxazole, polythiazole, polyvinylpyridine, polyvinylimidazole, and polybenzimidazole.
15. (previously presented) The method according to claim 2, wherein the basic polymer is selected from the group consisting of polybenzimidazole, polypyridine, polypyrimidine, polyimidazole, polybenzthiazole, polybenzoxazole, polyoxadiazole, polyquinoline, polyquinoxaline, polythiadiazole, polytetrazapyrene, polyoxazole, polythiazole, polyvinylpyridine, polyvinylimidazole, and polybenzimidazole.
16. (previously presented) The method as claimed in claim 15, wherein the temperature is 35°C or above and the immersion is 1 hour or less.
17. (previously presented) The process as claimed in claim 11, wherein said temperature is 50°C or above and the immersion time is 30 minutes or less.
18. (previously presented) The process as claimed in claim 12, wherein said temperature is 50°C or above and the immersion time is 30 minutes or less.
19. (previously presented) The method according to claim 17, wherein said temperature is from 50°C to 200°C.

20. (previously presented) A fuel cell comprising a plurality of cells, wherein the cell is provided with a polyelectrolyte membrane produced by the method according to claim 1, and with a pair of electrodes sandwiching the polyelectrolyte membrane.
21. (new) The process as claimed in claim 15, wherein said temperature is 50°C or above and the immersion time is 30 minutes or less and the strong acid is phosphoric acid or sulfuric acid.
22. (new) The method according to claim 1, wherein the strong acid is phosphoric acid having a concentration of not less than 90% by weight.
23. (new) The method according to claim 1, wherein the strong acid is phosphoric acid having a concentration of not less than 95% by weight.